

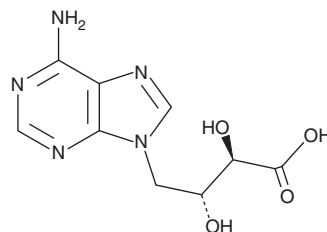
# PRODUCT INFORMATION



## D-Eritadenine

Item No. 21747

**CAS Registry No.:** 23918-98-1  
**Formal Name:** 6-amino- $\alpha$ R, $\beta$ R-dihydroxy-9H-purine-9-butanoic acid  
**MF:** C<sub>9</sub>H<sub>11</sub>N<sub>5</sub>O<sub>4</sub>  
**FW:** 253.2  
**Purity:**  $\geq$ 95%  
**UV/Vis.:**  $\lambda_{\text{max}}$ : 210, 261 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

D-Eritadenine is supplied as a solid. A stock solution may be made by dissolving the D-eritadenine in the solvent of choice, which should be purged with an inert gas. D-Eritadenine is slightly soluble in 1N hydrochloric acid.

### Description

D-Eritadenine is an adenosine analog and a potent, reversible inhibitor of S-adenosylhomocysteine hydrolase (SAAH; IC<sub>50</sub> = 7 nM).<sup>1</sup> It inhibits growth of *C. parvum* parasites (MIC<sub>50</sub> = 3  $\mu$ M) without exhibiting cytotoxicity in HCT-8 cells (CC<sub>50</sub> = >1 mM).<sup>2</sup> Dietary administration of D-eritadenine (50 mg/kg) increases liver microsomal phosphatidylethanolamine concentration and decreases liver microsomal  $\Delta^6$  desaturase activity and plasma cholesterol levels in rats.<sup>3</sup>

### References

1. Huang, Y., Komoto, J., Takata, Y., *et al.* Inhibition of S-adenosylhomocysteine hydrolase by acyclic sugar adenosine analogue D-eritadenine. Crystal structure of S-adenosylhomocysteine hydrolase complexed with D-eritadenine. *J. Biol. Chem.* **277**(9), 7477-7482 (2002).
2. Ctrnáctá, V., Fritzler, J.M., Surinová, M., *et al.* Efficacy of S-adenosylhomocysteine hydrolase inhibitors, D-eritadenine and (S)-DHPA, against the growth of *Cryptosporidium parvum* in vitro. *Exp. Parasitol.* **126**(2), 113-116 (2010).
3. Shimada, Y., Yamakawa, A., Morita, T., *et al.* Effects of dietary eritadenine on the liver microsomal  $\Delta^6$ -desaturase activity and its mRNA in rats. *Biosci. Biotechnol. Biochem.* **67**(6), 1258-1266 (2003).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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